

H.R. 2733
AS AMENDED BY THE SUBCOMMITTEE ON
ENVIRONMENT, TECHNOLOGY, AND STANDARDS
ON DECEMBER 12, 2001

Strike all after the enacting clause and insert the following:

1 SECTION 1. SHORT TITLE.

2 This Act may be cited as the “Enterprise Integration
3 Act of 2001”.

4 SEC. 2. FINDINGS.

5 The Congress makes the following findings:

6 (1) Over 90 percent of United States companies
7 engaged in manufacturing are small and medium-
8 sized businesses.

9 (2) Most of these manufacturers produce goods
10 for assemblage into products of large companies.

11 (3) The emergence of the World Wide Web and
12 the promulgation of international standards for
13 product data exchange greatly accelerated the move-
14 ment toward electronically integrated supply chains
15 during the last half of the 1990’s.

16 (4) European and Asian countries are investing
17 heavily in electronic enterprise standards develop-
18 ment, and in preparing their smaller manufacturers

1 to do business in the new environment. European ef-
2 forts are well advanced in the aerospace, automotive,
3 and shipbuilding industries and are beginning in
4 other industries including home building, furniture
5 manufacturing, textiles, and apparel. This invest-
6 ment could give overseas companies a major com-
7 petitive advantage.

8 (5) The National Institute of Standards and
9 Technology, because of the electronic commerce ex-
10 pertise in its laboratories and quality program, its
11 long history of working cooperatively with manufac-
12 turers, and the nationwide reach of its manufac-
13 turing extension program, is in a unique position to
14 help United States large and smaller manufacturers
15 alike in their responses to this challenge.

16 (6) It is, therefore, in the national interest for
17 the National Institute of Standards and Technology
18 to accelerate its efforts in helping industry develop
19 standards and enterprise integration processes that
20 are necessary to increase efficiency and lower costs.

21 **SEC. 3. ENTERPRISE INTEGRATION INITIATIVE.**

22 (a) ESTABLISHMENT.—The Director shall establish
23 an initiative for advancing enterprise integration within
24 the United States. In carrying out this section, the Direc-
25 tor shall involve, as appropriate, the various units of the

1 National Institute of Standards and Technology, including
2 the National Institute of Standards and Technology lab-
3 oratories (including the Building and Fire Research Lab-
4 oratory), the Manufacturing Extension Partnership pro-
5 gram established under sections 25 and 26 of the National
6 Institute of Standards and Technology Act (15 U.S.C.
7 278k and 278l), and the Malcolm Baldrige National Qual-
8 ity Program. This initiative shall build upon ongoing ef-
9 forts of the National Institute of Standards and Tech-
10 nology and of the private sector, shall involve consortia
11 that include government and industry, and shall address
12 the enterprise integration needs of each United States
13 major manufacturing industry at the earliest possible
14 date.

15 (b) ASSESSMENT.—For each major manufacturing
16 industry, the Director may work with industry, trade asso-
17 ciations, professional societies, and others as appropriate,
18 to identify enterprise integration standardization and im-
19 plementation activities underway in the United States and
20 abroad that affect that industry and to assess the current
21 state of enterprise integration within that industry. The
22 Director may assist in the development of roadmaps to
23 permit supply chains within the industry to operate as an
24 integrated electronic enterprise. The roadmaps shall be
25 based on voluntary consensus standards.

1 (c) REPORTS.—Within 180 days after the date of the
2 enactment of this Act, and annually thereafter, the Direc-
3 tor shall submit to the Committee on Science of the House
4 of Representatives and the Committee on Commerce,
5 Science, and Transportation of the Senate a report on the
6 National Institute of Standards and Technology's activi-
7 ties under subsection (b).

8 (d) AUTHORIZED ACTIVITIES.—In order to carry out
9 this Act, the Director may work with industry, trade asso-
10 ciations, professional societies, and others as
11 appropriate—

12 (1) to raise awareness in the United States of
13 enterprise integration activities in the United States
14 and abroad, including by the convening of con-
15 ferences;

16 (2) on the development of enterprise integration
17 roadmaps;

18 (3) to support the development, testing, promul-
19 gation, integration, adoption, and upgrading of
20 standards related to enterprise integration including
21 application protocols; and

22 (4) to provide technical assistance and, if nec-
23 essary, financial support to small and medium-sized
24 businesses that set up pilot projects in enterprise in-
25 tegration.

1 (e) MANUFACTURING EXTENSION PROGRAM.—The
2 Director shall ensure that the Manufacturing Extension
3 Program is prepared to advise small and medium-sized
4 businesses on how to acquire the expertise, equipment, and
5 training necessary to participate fully in supply chains
6 using enterprise integration.

7 **SEC. 4. DEFINITIONS.**

8 For purposes of this Act—

9 (1) the term “automotive” means land-based
10 engine-powered vehicles including automobiles,
11 trucks, busses, trains, defense vehicles, farm equip-
12 ment, and motorcycles;

13 (2) the term “Director” means the Director of
14 the National Institute of Standards and Technology;

15 (3) the term “enterprise integration” means the
16 electronic linkage of manufacturers, assemblers, sup-
17 pliers, and customers to enable the electronic ex-
18 change of product, manufacturing, and other busi-
19 ness data among all partners in a product supply
20 chain, and such term includes related application
21 protocols and other related standards;

22 (4) the term “major manufacturing industry”
23 includes the aerospace, automotive, electronics, ship-
24 building, construction, home building, furniture, tex-

1 tile, and apparel industries and such other industries
2 as the Director designates; and

3 (5) the term “roadmap” means an assessment
4 of manufacturing interoperability requirements de-
5 veloped by an industry describing that industry’s
6 goals related to enterprise integration, the knowledge
7 and standards including application protocols nec-
8 essary to achieve those goals, and the necessary
9 steps, timetable, and assignment of responsibilities
10 for acquiring the knowledge and developing the
11 standards and protocols.

12 **SEC. 5. AUTHORIZATION OF APPROPRIATIONS.**

13 There are authorized to be appropriated to the Direc-
14 tor to carry out functions under this Act—

- 15 (1) \$2,000,000 for fiscal year 2002;
16 (2) \$10,000,000 for fiscal year 2003;
17 (3) \$15,000,000 for fiscal year 2004; and
18 (4) \$20,000,000 for fiscal year 2005.